

What is claimed is:

1. A power supply apparatus for supplying electric power to a substrate carrier container having a rechargeable cell, comprising:

a body for seating a substrate carrier container thereon;

a seating detecting device provided on said body for detecting whether said substrate carrier container is seated on said body or not;

a power supply connector movably provided on said body; and

a control mechanism for bringing said power supply connector into contact with a charging terminal of said substrate carrier container to charge said rechargeable cell in said substrate carrier container according to a detected signal from said seating detecting device.

2. A power supply apparatus according to claim 1, wherein said substrate carrier container has at least one of an air cleaner and a dehumidifying device disposed therein.

3. A power supply apparatus according to claim 1, wherein said seating detecting device comprises at least one of a mechanical switch, a proximity switch, and a photoelectric sensor.

4. A power supply apparatus for supplying electric

power to a substrate carrier container having an electrical component energized by an external power source, comprising:

a body for seating a substrate carrier container thereon;

5 a seating detecting device provided on said body for detecting whether said substrate carrier container is seated on said body or not;

a power supply connector movably provided on said body; and

10 a control mechanism for bringing said power supply connector into contact with a power supply terminal of said substrate carrier container to supply electric power to said electrical component according to a detected signal from said seating detecting device.

15 5. A power supply apparatus according to claim 4, wherein said substrate carrier container has at least one of an air cleaner and a dehumidifier disposed therein.

20 6. A power supply apparatus according to claim 4, wherein said seating detecting device comprises at least one of a mechanical switch, a proximity switch, and a photoelectric sensor.

25 7. A method of supplying electric power to a substrate carrier container having a rechargeable cell, comprising:

seating a substrate carrier container on a body of

a power supply apparatus;

detecting whether said substrate carrier container is seated on said body with a seating detecting device provided on the body or not;

5 moving a power supply connector provided on said body to bring said power supply connector into contact with a charging terminal of said substrate carrier container;

charging said rechargeable cell in said substrate carrier container according to a detected signal from said
10 seating detecting device; and

returning said power supply connector to an original position thereof after said rechargeable cell is charged.

15 8. A method of supplying electric power to a substrate carrier container having an electrical component energized by an external power source, comprising:

seating a substrate carrier container on a body of a power supply apparatus;

20 detecting whether said substrate carrier container is seated on said body with a seating detecting device provided on the body or not;

moving a power supply connector provided on said body to bring said power supply connector into contact with a
25 power supply terminal of said substrate carrier container;

supplying electric power to said electrical component according to a detected signal from said seating detecting device; and

returning said power supply connector to an original position thereof after the electric power is supplied to said electrical component.